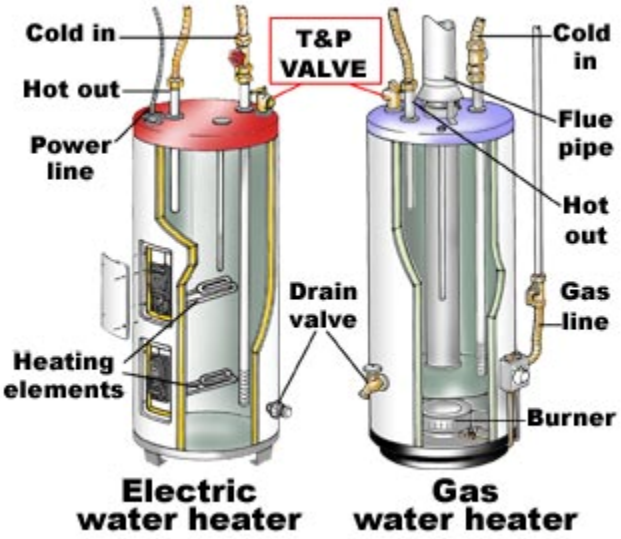
Water heater information

Hot Water Heater T&P Valve

Every water heater, gas or electric, should have a temperature and pressure relief valve, commonly called a T&P valve. Your water heater isn't safe without one. It's so important, in fact, that many states require factories to install T&P valves rather than leaving the decision to homeowners and installers.



The T&P valve is crucial because a water heater is a pressurized tank, and all such tanks need a way to release pressure if it becomes too great. As water is heated, it expands, increasing pressure. If something goes wrong and the tank overheats, the pressure could rupture the tank. To prevent this, the T&P valve monitors both water temperature (210 degrees maximum) and tank pressure (150 psi maximum) and opens if either goes too high.

The T&P valve is the only protection against *both* excessive pressure *and* high temperature. Both electric and gas water heaters have thermostats, and electric ones also have overload switches (the red button above the top thermostat). But if the city raised its water pressure without telling you and if your water heater was set at a high temperature, the tank could rupture. Without a working T&P valve, a pipe could blow off the heater (after its plastic or solder melts) or the tank could explode. The overflow pipe that drains from the T&P valve needs to be rated to withstand this high temperature and pressure. The preferred material is copper, but other acceptable materials include galvanized steel and CPVC rated to withstand 150 psi and 210 degrees (this is NOT standard white PVC).